

WATER PERMIT NO. 2343-2

Name of Applicant: Edward A. Bergeson

Address: 25969 213th St, Ft. Pierre SD 57532

Phone: 567-3560

Amount of Water Claimed: ~~32.7~~ ^{59.7} 32.7 acre-feet

Total Acres: NA

Source of Water Supply: runoff

Depth of Well: NA

Water to be used for: livestock watering

County: Stanley

Type of Waste Disposal System: NA

Location: 7 miles southeast of Hayes

PRIORITY

Date Received: 8-10-95

Fee: \$150.00

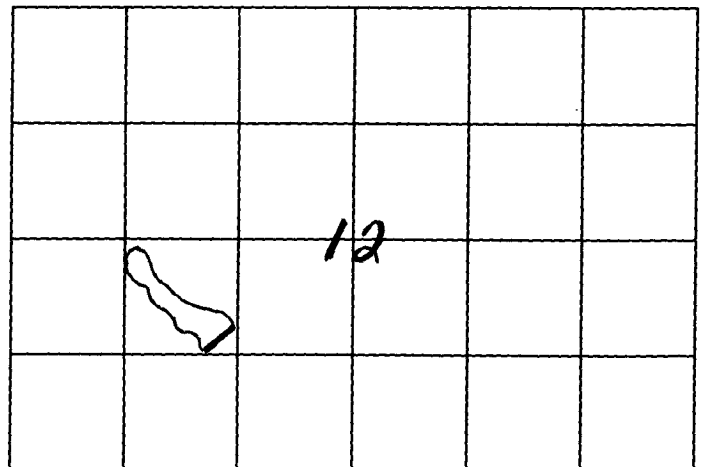
Corrected Application Received:

Period of Annual Use: January 1 - December 31

Remarks:

Diversion Point: NW 1/4 SW 1/4 Sec 12-T4N-
R26E

Water Impounded: NW 1/4 SW 1/4 Sec 12-
T4N-R26E



Reviewed and the Number Assigned on: 8-10-95

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

FORM 2: Application for uses other than irrigation
(type or print)

Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. 2343-2 Hydrologic Unit 10140102
Basin Bad River
Newspaper Capital Journal, PO Box 878, Pierre
(office use only)



Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water:

☐ Municipal ☐ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☐ Fish & Wildlife ☐ Geothermal Heat
☐ Domestic (over 18 gpm) ☐ Industrial ☒ Other Livestock

Type of Application:
(check one)

☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) _____

- Name of Applicant Edward A. Bergeson Phone 567-3560
(check one) ☐ Owner ☒ Tenant/lessee
Mailing Address 25969 213th St. Ft. Pierre State S.D. 57532
(Street, RR, or Box) (City) (Zip Code)
- Amount of water claimed _____ *CFS or _____ **GPM 32.7 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply runoff
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) _____
1500' No. 500 Ft. E. of the S.W. Corner of Sec. 12 T4N.
R. 26 E. (NW1/4 SW1/4) NW1/4 SW1/4 Sec 12-T4N-R26E County Stanley
Water Impounded:
- County or counties where water will be used Stanley
- Annual period during which water is to be used Year around Jan 1 - Dec 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
Pond to be constructed for livestock watering.

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

STATE OF SOUTH DAKOTA)

County of Stanley ^{SS}

I, Beona Reynolds, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Beona Reynolds

Subscribed and sworn to before me this 10th day of August 19 95

My Commission Expires: 4-27-98 Christi L. Beck
(SEAL) Notary Public

SOUTH DAKOTA
WATER PERMIT NO. 2343-2

Date of first receipt of application August 10, 1995.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2343-2 to Edward A. Berguson, 25969 213th St., Ft. Pierre SD 57532 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 2343-2 impounds 32.7 acre-feet of runoff water by constructing a dam located in the NW 1/4 SW 1/4 Section 12 with water impounded in the NW 1/4 SW 1/4 Section 12; all in T4N-R26E.
2. The water appropriated shall be used for the purpose of supplying water for livestock watering and may not exceed the amount of water needed for beneficial use for domestic purposes.
3. The water is to be used during the following described annual period: January 1 - December 31
4. The date of approval of Permit No. 2343-2 is September 11, 1995.
5. The date from which applicant may claim right is August 10, 1995.
6. One-fifth of the construction is to be completed on or before March 11, 1998.
7. All construction is to be completed on or before September 11, 2000.
8. Water is to be put to beneficial use on or before September 11, 2004.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

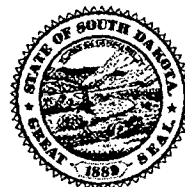
QUALIFICATIONS

1. Water Permit No. 2343-2 authorizes a dam with storage capacity of 32.7 acre-feet of water and sufficient water annually to maintain a water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

WATER MANAGEMENT BOARD

By: John Hatch
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

DEC 18 1995
date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ c) Year Constructed _____
- d) Connected to the City of _____ Sanitary System.

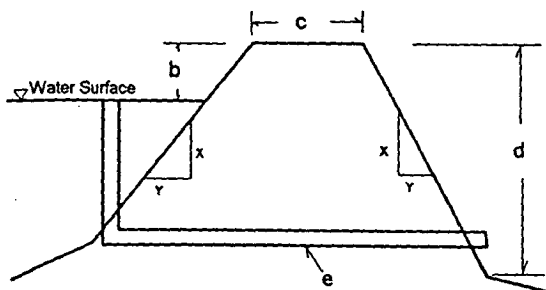
3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



- b) Freeboard 3.0'
- c) Crest Width 12.0'
Crest Length 254.0'
- d) Height 29.6'
- e) Primary Outlet Capacity _____
If pipe, diameter 30" Riser 18" Barrel
- f) Secondary Spillway Capacity 860'
Spillway Width _____
- g) X & Y Slope
Upstream 3:1
Downstream 3:1
- h) Surface Area of Impoundment 5.0
- i) Storage 59.7 32.7 Acre Feet
- j) Drainage Area Above Dam 755 Acres



RECEIPT

414585

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ August 11, 19 95

RECEIVED OF Beona Reynolds (Edward Bergeson), PO Box 934, Ft. Pierre, SD 57532

the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>2343-2</u> to Appropriate Water, to construct and to put water to beneficial use _____	150	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	150 00

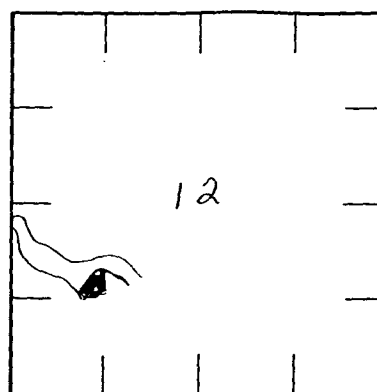
By John Hatch
Chief Engineer

STRUCTURE DATA

DRAINAGE AREA	ANNUAL YIELD	PEAK RUNOFF	EMERG. SPLWY. CAPACITY	WATER DEPTH	SURFACE AREA	SEDIMENT STORAGE	TOTAL STORAGE
ACRES	AC.FT.	25-YR.	C.F.S.	FEET	ACRES	AC.FT.	AC.FT.
255	32.7	457	5.4	17	4.0		34.0

5.4 cfs/ft width

5.4 x 86 = 464 cfs

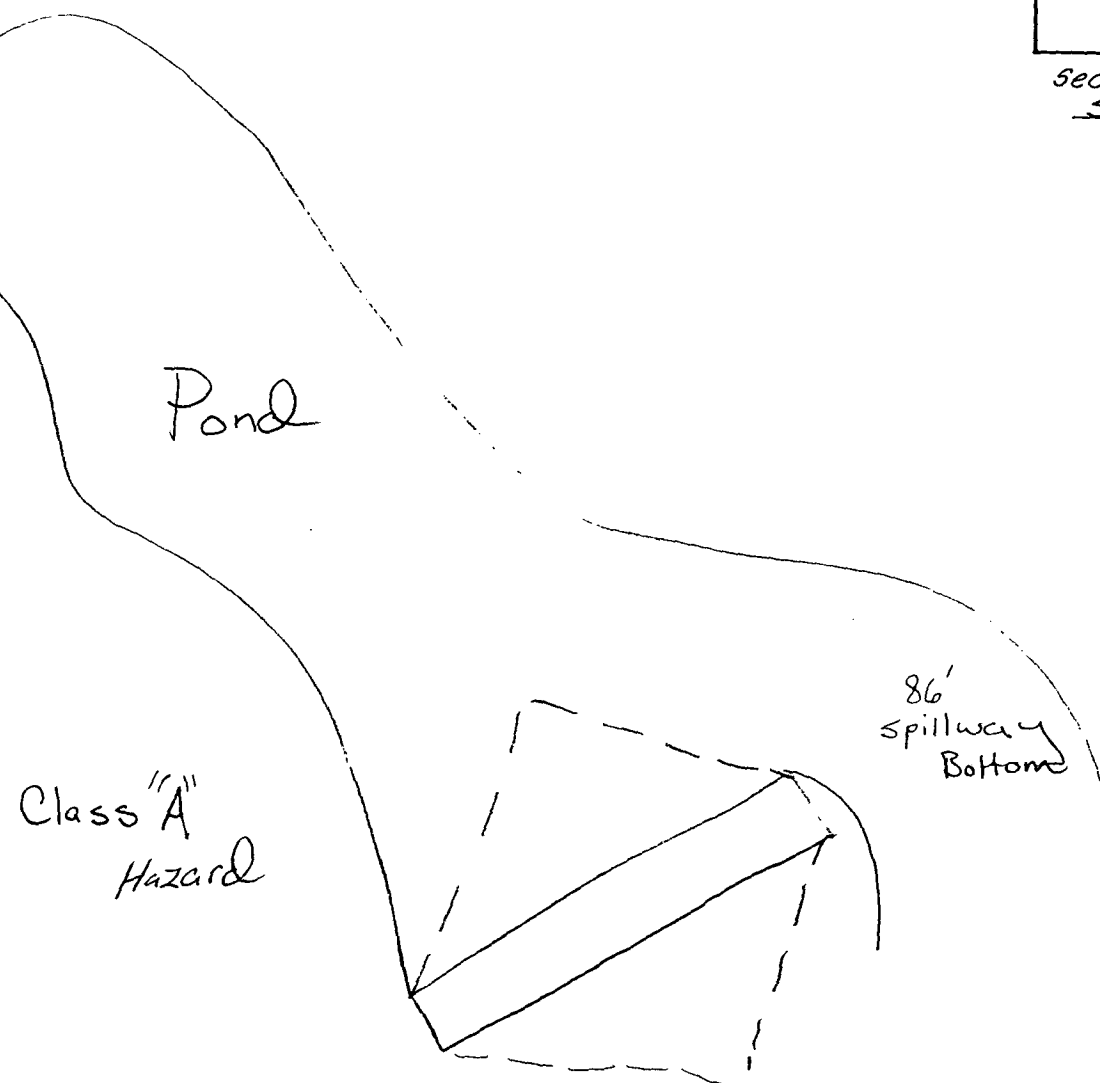


Sec. 12 T. 4N R. 26E
Stanley County

LOCATION

TABLE OF QUANTITIES

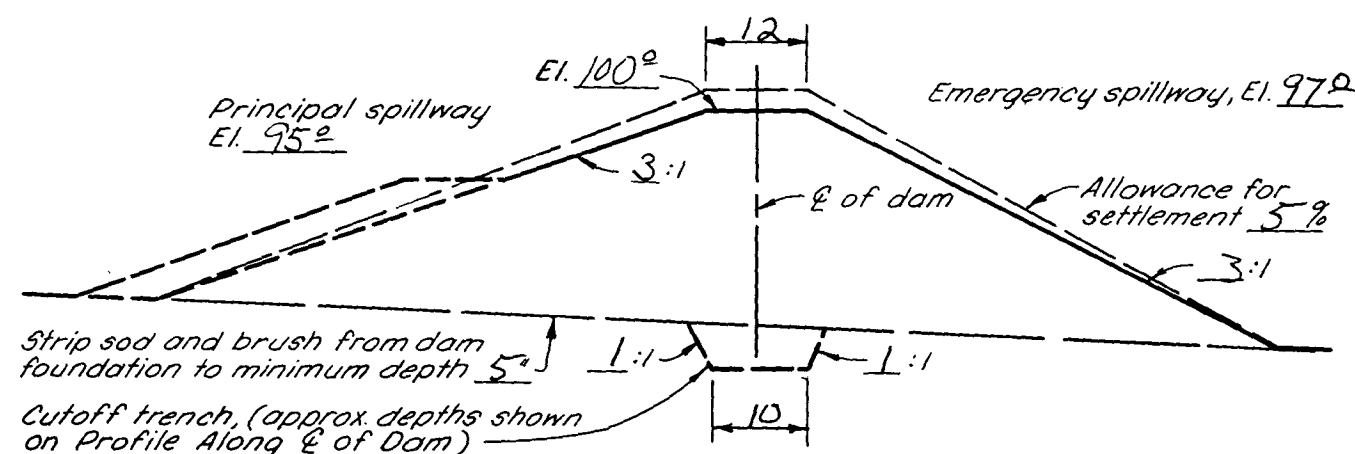
ITEM	UNIT	QUANTITY
Earth Fill + 5% Settlement	Cu yds	9,467
Stripping	Cu yds	453
Core Trench	Cu yds	325
Total	Cu yds	10,245
4' x 30" riser w/ 4' x 18" stub	Ea	1
18" Dia. dual wall P.E. pipe	Ft	120
Sand Seep Collar	Cy	4.3
Trash Rack	Ea	1
Pipe support	Ea	1



Note: Design approval based on approved
Water right from producer, K&P

SKETCH PLAN OF DAM AND RESERVOIR AREA

Approximate scale 1" = 100'



TYPICAL CROSS SECTION OF DAM

S.D. CONSTRUCTION AND MATERIAL SPECIFICATIONS:

- SD-1 Clearing
- SD-7s Earth Fill Class - S
- SD-16 Timber Fabrication & Installation
- SD-55 Plastic Pipe
- Attached specs on dual-wall PE pipe
- SD-4 Stripping

EARTH DAM

OPERATOR: Ed Bergeson
CONSERVATION DISTRICT: Stanley Co.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

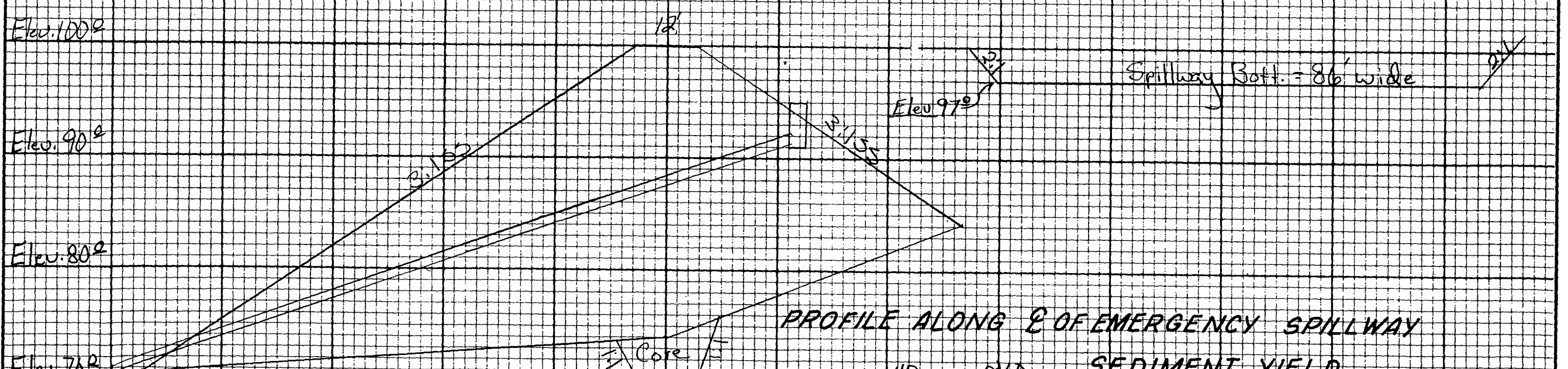
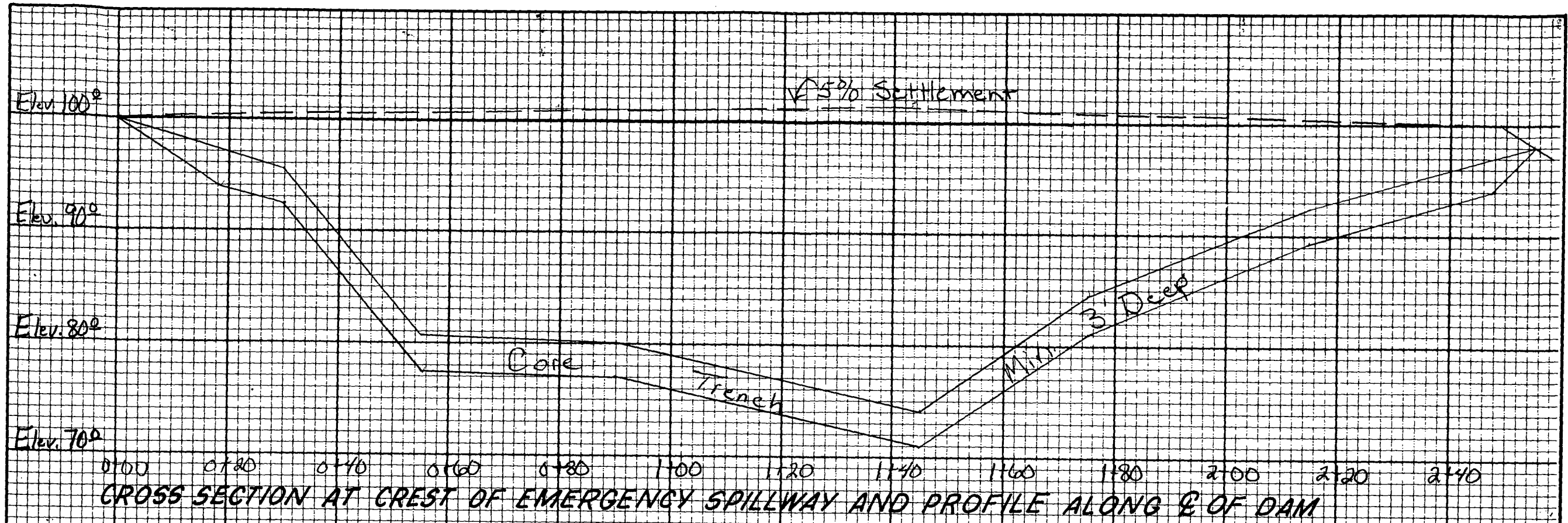
Designed <u>K. Paulsen</u>	Date <u>8-95</u>	Approved by _____
Drawn _____	Title _____	
Traced _____	Sheet _____	Drawing No. _____
Checked _____	No. _____	of _____

REFERENCE: GUIDE PLAN NO. 1.0

JOB PLAN NO. 1.0

(Rev. 4-73) 5, N-29, 073.10(1)

2343-2



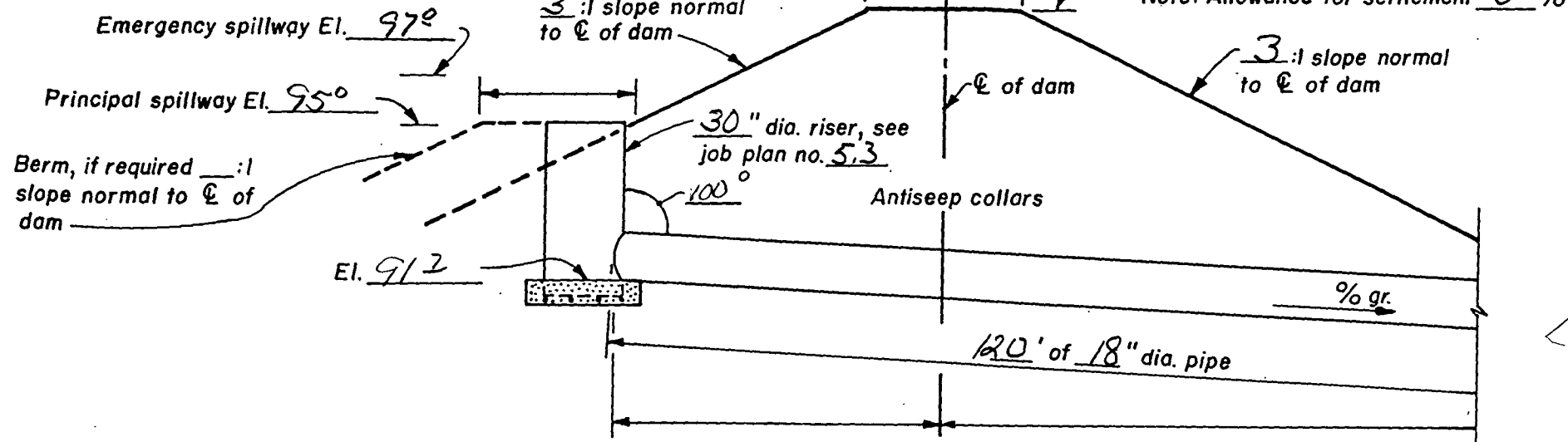
MAXIMUM CROSS SECTION OF DAM

0+00 0+20 0+40 0+60 0+80 0+100 0+120 0+140 0+160 0+180

SEDIMENT YIELD

ERODIBILITY AREA ACRES	GROSS RATE A.F./AC./YR.	DRAINAGE AREA ACRES	DELIVERY RATE %	DESIGN PERIOD YEARS	REQ'D. SEDIMENT VOLUME AC.FT.

Locate principal spillway pipe at $\mathcal{C}$ of dam sta. $1 + 45$, at an angle of 90° to the $\mathcal{C}$ of the dam.



CROSS SECTION OF DAM ALONG $\mathcal{C}$ OF PRINCIPAL SPILLWAY
(Not to scale)

SPECIFICATION NOTES

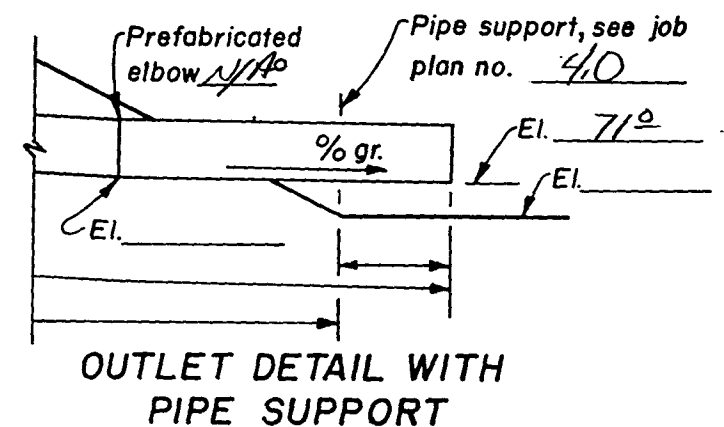
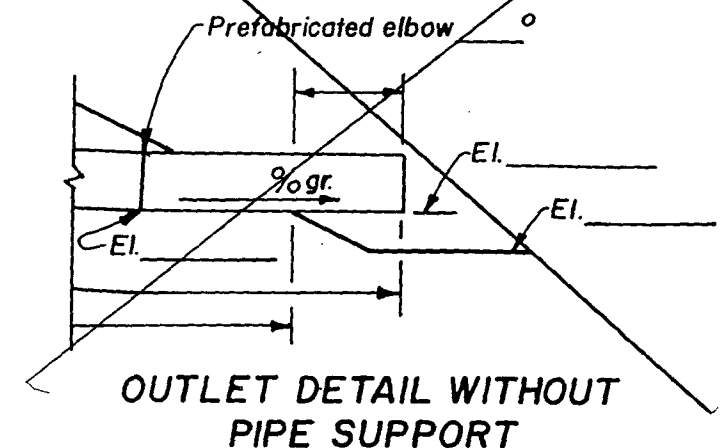
1. ELBOW, IF REQUIRED, MAY BE FABRICATED BY CONTINUOUS WELDING SEPERATE PIPE SECTIONS OR BY FABRICATING A CONTINUOUS WELDED JOINT ON THE UPSTREAM END OF LAST SECTION OF PIPE.
2. PIPE WALL THICKNESS SHALL BE $\frac{1}{8}$ GAGE OR $\frac{1}{8}$ INCHES.

18" barrel is dual walled PE pipe
36" riser is dual walled PE pipe

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
See Job Plan No. 1		

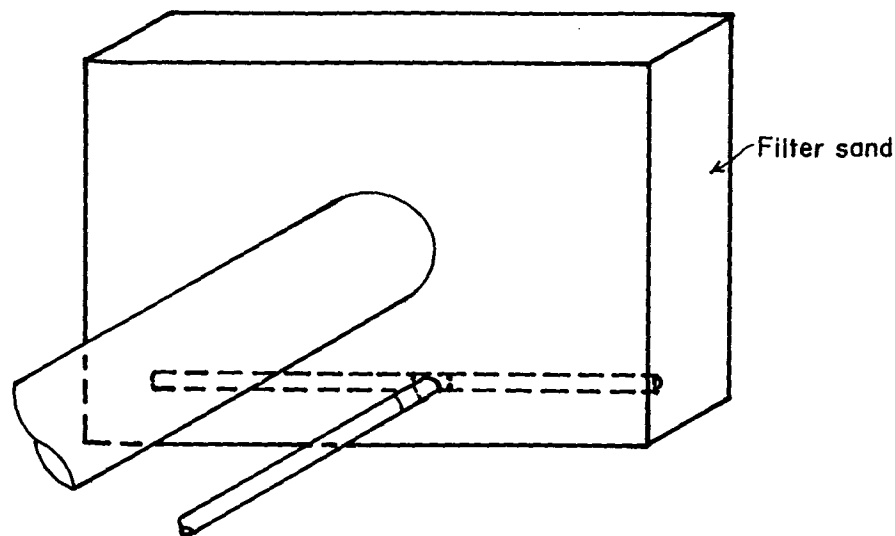
APPLICABLE STANDARD S.C.S. SPECIFICATIONS



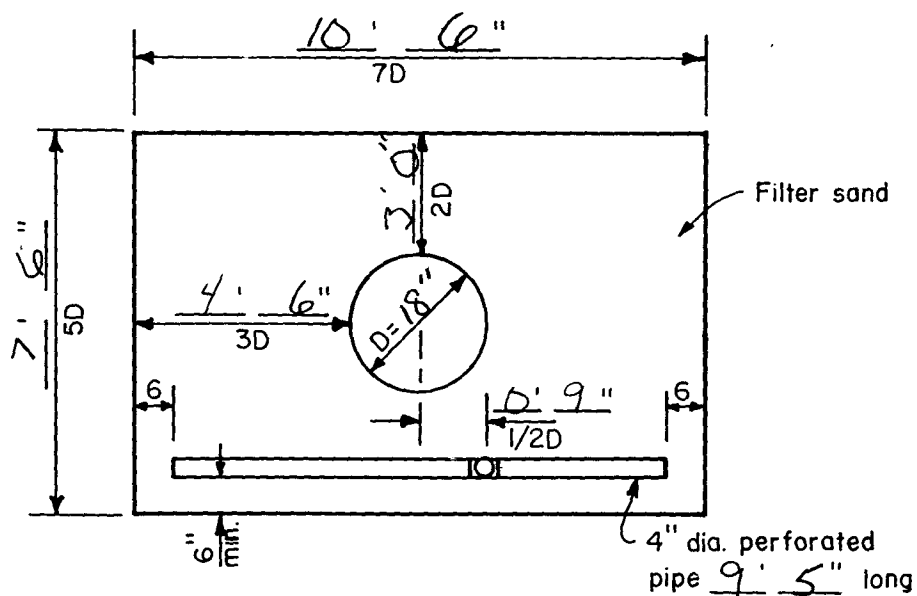
Sec. 12, T. 4N, R. 26E
Stanley County
LOCATION

CORRUGATED METAL PIPE DROP INLET PRINCIPAL SPILLWAY

OPERATOR <u>Ed Bergeson</u>	
CONSERVATION DISTRICT <u>Stanley Co.</u>	
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed <u>K. Paulsen</u>	Date <u>8-85</u>
Drawn	Approved by
Traced	Title
Checked	Sheet No.
	Drawing No.



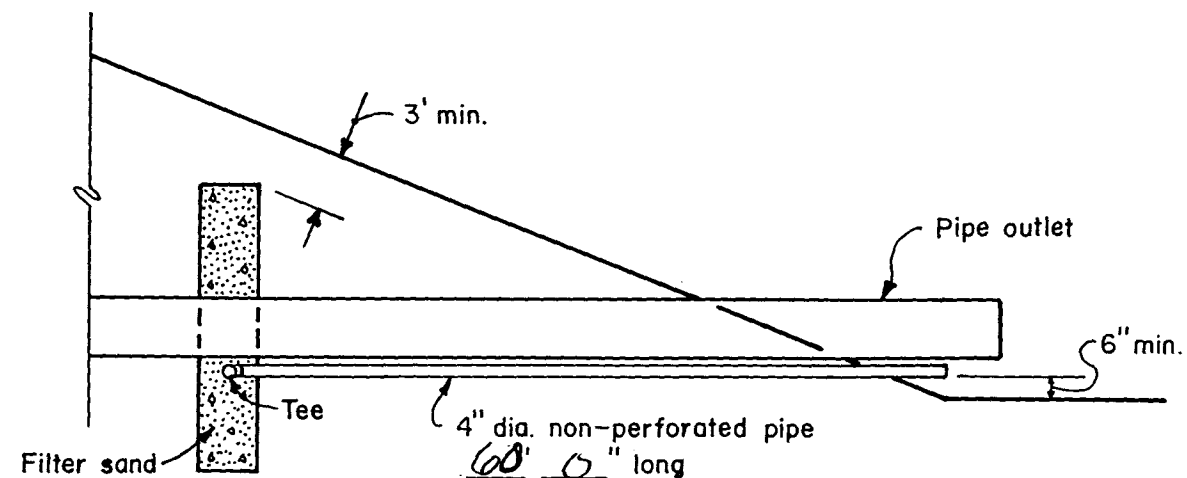
ISOMETRIC VIEW



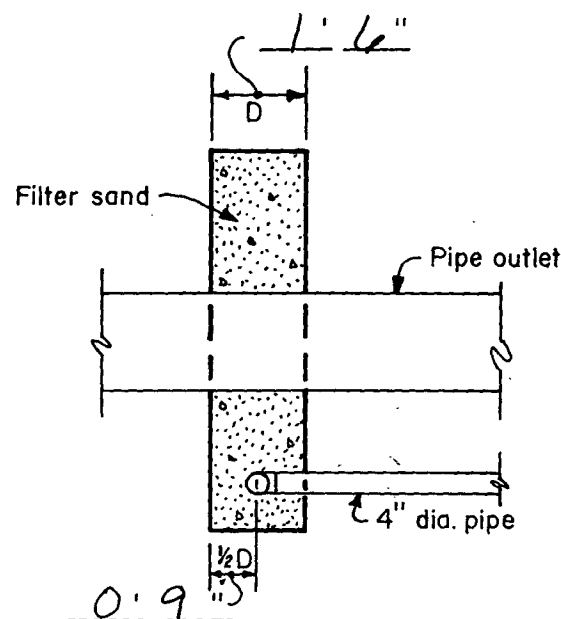
UPSTREAM VIEW

NOTE:

1. THE 4" DIA. PIPE SHALL BE ASTM D1785, SCHEDULE 40, PVC.
2. PROVIDE AN ANIMAL GUARD ON DRAIN OUTLET PIPE. DRILL 2, 1/2" DIA. HOLES, ON $\pm 6"$ FROM END OF PIPE AND PLACE A 3/8" DIA., 5 1/2" LONG GALVANIZED STEEL BOLT THRU THEM AND SECURE WITH A NUT (PLACE BOLT HORIZONTAL).



OUTLET DETAIL



SIDE VIEW

FILTER GRADATION

SIEVE SIZE	PERCENT PASSING
3/8"	100
4	95-100
8	80-100
16	50-85
30	25-60
50	10-30
100	2-10

Sec. 12, T. 4N, R. 26E

Stanley County
LOCATION

SAND ANTISEEP COLLAR

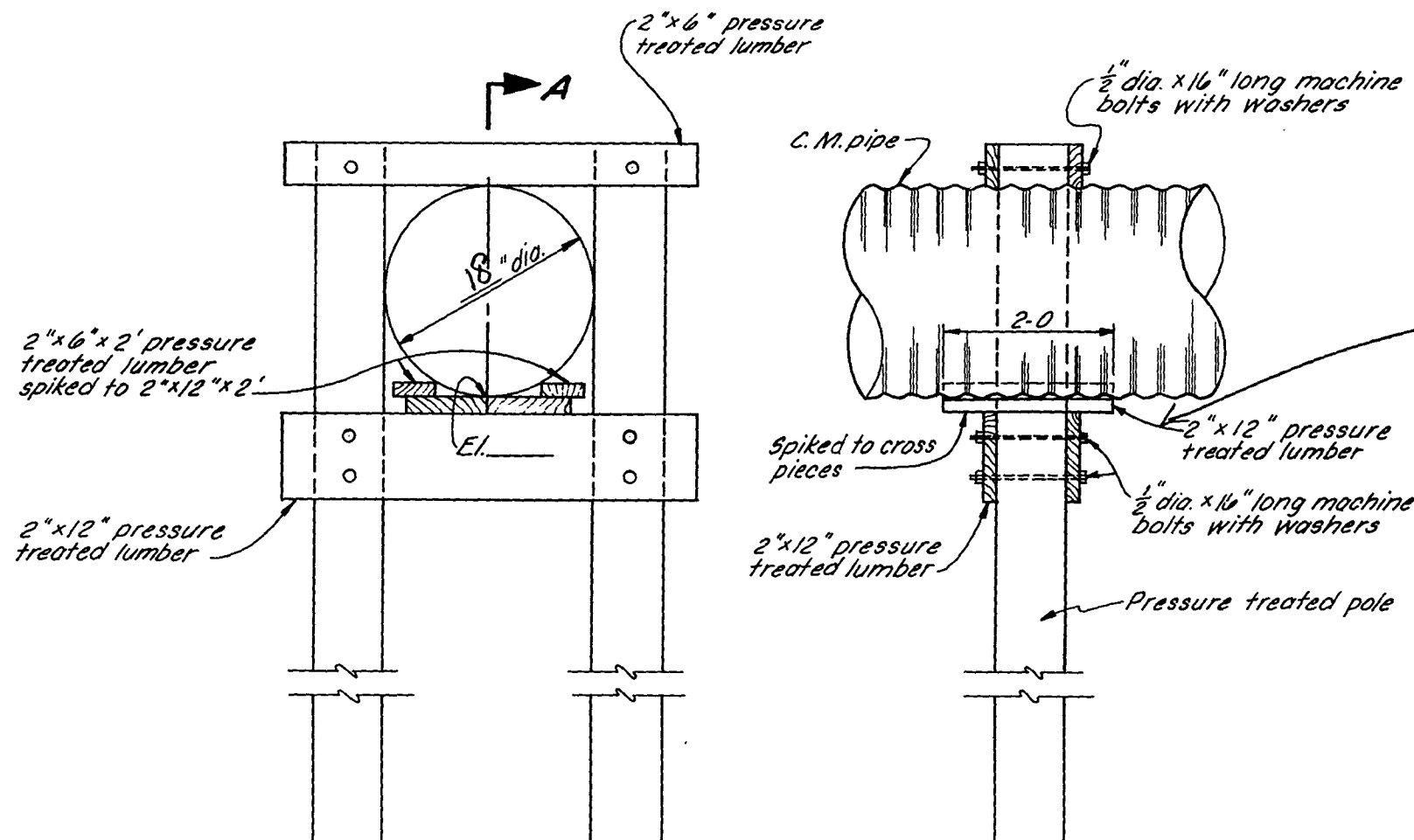
OPERATOR ED Bergeson

CONSERVATION DISTRICT Stanley Co.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed Kevin Paulsen Date 8/2 Approved by _____
Drawn _____ Title _____
Traced _____ Sheet _____ Drawing No. _____
Checked _____ of _____

JOB PLAN NO. 3.8



ELEVATION

SECTIONAL ELEVATION A-A

Note: For PE pipe extend timber under pipe to outlet end of pipe.

NOTES:

- HAND OR MACHINE TAMP BACKFILL THOROUGHLY AROUND FOOTINGS AND COLUMNS.

TABLE OF QUANTITIES

ITEM	LENGTH FOR 18" DIA. P.E. PIPE	UNIT	QUANTITY
PRESSURE TREATED POLE 10" DIA.	8-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	4-0	EACH	6
2" X 6" PRESSURE TREATED LUMBER	4-0	EACH	2
2" X 12" PRESSURE TREATED LUMBER	2-0	EACH	3
2" X 6" PRESSURE TREATED LUMBER	2-0	EACH	2
1/2" DIA. MACHINE BOLTS WITH NUTS	16"	EACH	10
1/2" DIA. WASHERS		EACH	20

REFERENCE: GUIDE PLAN NO. 4.0

JOB PLAN NO. 4.0

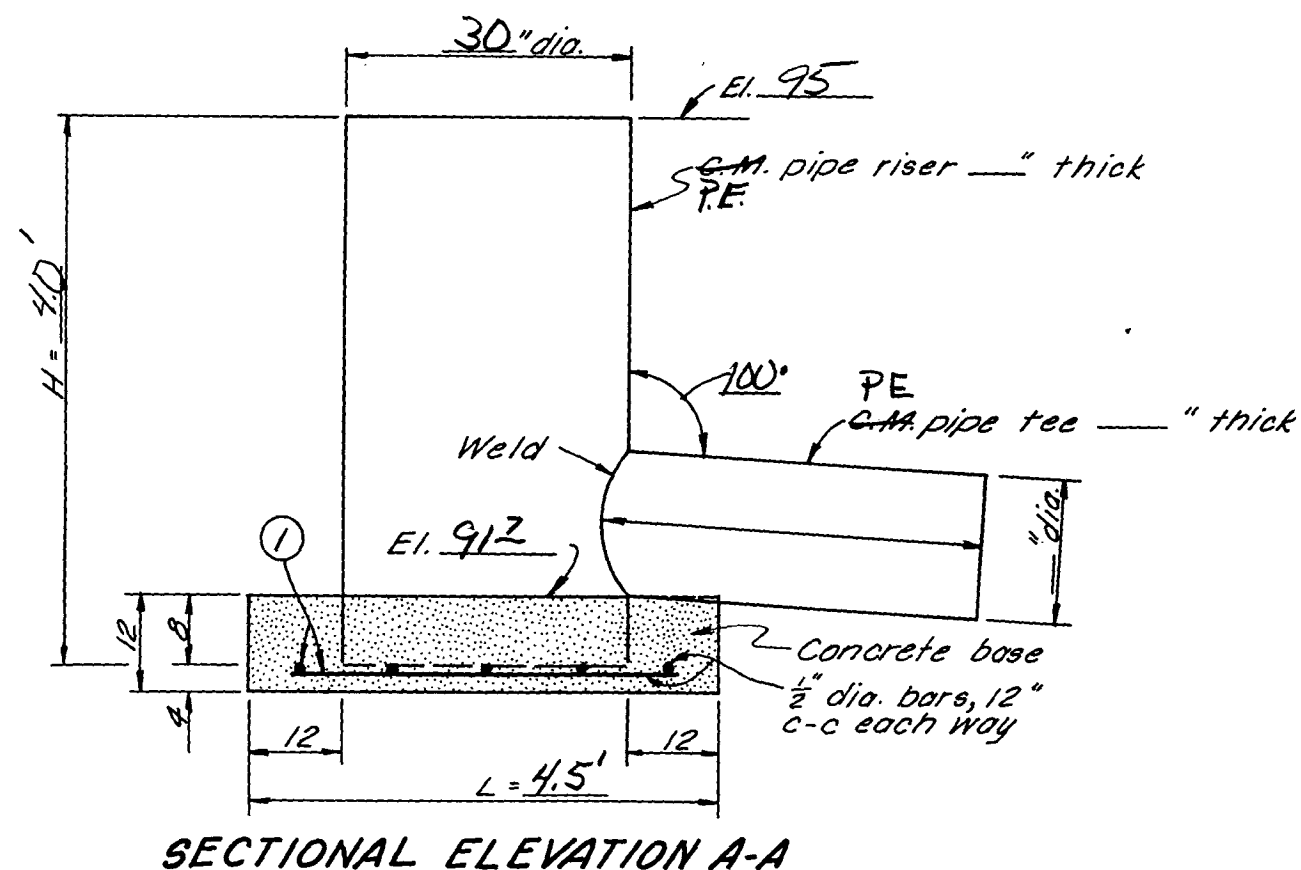
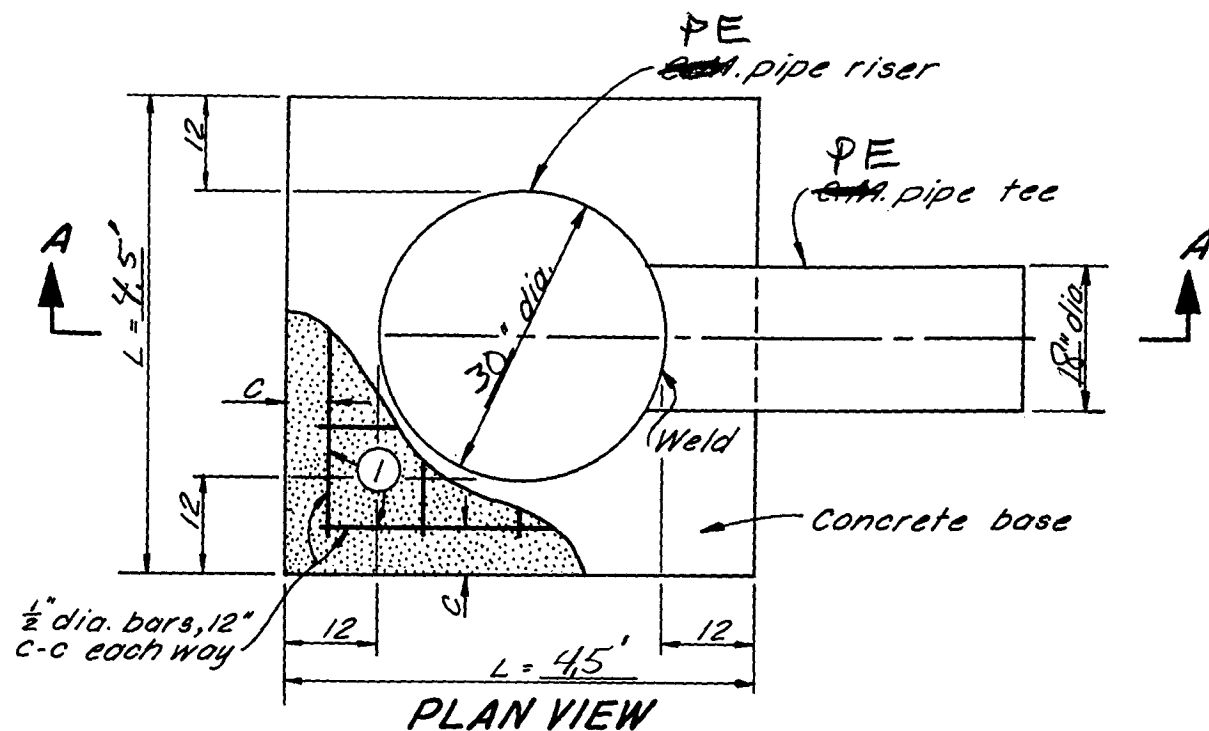
TIMBER PIPE SUPPORT

OPERATOR: Ed Bergeson
 CONSERVATION DISTRICT: Stanley Co.

U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

Designed by K. Paulsen Date 8-95 Approved by _____
 Drawn _____ Title _____
 Traced _____ Title _____
 Checked _____ Sheet No. _____ Drawing No. _____

5, N-29,073.4a



STEEL SCHEDULE

RISER DIA. IN.	BAR SIZE	MARK	TYPE	NO. REQ'D.	LENGTH FT.-IN.	TOTAL LENGTH FT.-IN.	TOTAL WT. LB.	C IN.	L FT.-IN.
30	4	1	STR.	10	4-0	40-0	27	3	4-6

TABLE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONCRETE	CU. YD.	0.8
REINFORCING STEEL	LB.	27

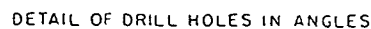
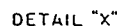
NOTE:

PE 8\"/>

OPERATOR: Ed Bergeson
 CONSERVATION DISTRICT: Stanley Co.

U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

Designed: K. Paulsen Date: 8-95 Approved by: _____
 Drawn: _____ Title: _____
 Traced: _____ Title: _____
 Checked: _____ Sheet No. _____ Drawing No. _____



Client : Ed Bergeson
County : Stanley
Practice: Pond

State: SD

By: KJP
Checked:

Date: 07-13-95
Date:

Drainage Area : 755 * Acres
Curve Number : 82 *
Watershed Length : 11000 Feet
Watershed Slope : 1.5 Percent
Time of Concentration: 2.76 Hours
Rainfall Type : II

Storm Number	1	2	3	4	5	6	7
Frequency (yrs)	1	2	5	10	25	50	100
24-Hr Rainfall (in)	1.8	2.1	2.9	3.4	4	4.4	5.1
Ia/P Ratio	0.24	0.21	0.15	0.13	0.11	0.10	0.09
Used	0.24	0.21	0.15	0.13	0.11	0.10	0.10
Runoff (in)	0.52	0.72	1.30	1.70	2.20	2.55	3.17
Unit Peak Discharge (cfs/acre/in)	0.243	0.251	0.265	0.270	0.275	0.277	0.277
Peak Discharge (cfs)	96	136	260	347	457	534	664

* - Value(s) provided by CN subroutine (F9)

86' spillway bottom
45.3 Ac.ft

EFM-2 ESTIMATING RUNOFF AND PEAK DISCHARGE VERSION 1.10
Curve Number Computation

Client : Ed Bergeson By: KJP Date: 07-13-95
County : Stanley State: SD Checked: Date:
Practice: Pond

COVER DESCRIPTION	Hydrologic Soil Group			
	A	B	C	D
	Acres (CN)			

CULTIVATED AGRICULTURAL LANDS
Small grain SR + Crop residue good - 300(84)

OTHER AGRICULTURAL LANDS
Pasture, grassland or range good - 455(80)

Total Area (by Hydrologic Soil Group) 755
=====

TOTAL DRAINAGE AREA: 755 Acres WEIGHTED CURVE NUMBER: 82

South Dakota
Dave Konechne

Ed Bergeson

$$Q_2 = 136$$

$$V_T = 43.2 \text{ Ac-ft}$$

$$V_r = 45.3$$

$$\frac{V_T}{V_r} = \frac{43.2}{45.3} = 0.95$$

$$\frac{Q_o}{Q_i} = .18$$

$$Q_o = 136 \times .18 = 24 \text{ cfs}$$

use 18" smooth $\frac{7}{8}$ $\approx 40 \text{ cfs}$

use 30" riser 4 ft long with 18" band

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service

STAGE STORAGE COMPUTATIONS

[illegible]



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

August 17, 1995

Kevin Paulsen
Natural Resources Conservation Service
316 S. Coteau, Suite 103
Pierre, SD 57501

Dear Mr. Paulsen:

We have reviewed the plans and specifications for the Edward A. Bergeson Dam located in the SW 1/4 of Section 12-T4N-R26E in Stanley County. The plans and specifications as submitted are approved. Approval of the plans and specifications does not authorize construction of the dam. Construction may not begin until Water Permit Application No. 2343-2 is approved.

Our review was to determine compliance with the requirements of the Water Management Board Safety of Dams Rules, Chapter 74:02:08. Approval of these plans and specifications does not release Mr. Bergeson, as owner of the dam, from the responsibility for operating and maintaining the dam in good repair to ensure the safety of the dam.

The Bergeson Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 29.6 feet and a normal storage capacity of 32.7 acre-feet and a maximum storage capacity of 59.7 acre-feet.

If you have any questions, please feel free to contact us.

Sincerely,

Gale N. Selken, P.E.
Natural Resources Engineer IV
for John Hatch, Chief Engineer
Water Rights Division
(605) 773-3352

c: Edward A. Bergeson

Water Permit Application #2343-2
Edward A. Bergeson

Top of Dam Elev. - 100
Primary Spillway - 95
2nd Spillway - 97
Bottom - 70

Height = 30 ft.

Cat. 3 - Low Hazard

Maximum Storage = 59.7 Ac.-Ft.
Intermediate = 43.2
Normal Storage = 32.7

Int. Storage (43.2) x Eff Height (27) = 1166 < 3000 $\therefore$ 25 year
Minimum Spillway Design

Using USGS "Tech. for Est. Flood Peaks in SD (WRI 80-80)

$$\begin{aligned}
 DA = 755 \text{ Ac} = 1.18 \text{ mi}^2 & \quad Q_{100} = 83.4 A^{.60} S^{.44} S_i^{-.72} & Q_{100} = 132 A^{.65} S^{.46} S_i^{-.67} \\
 \text{Slope} = 80' / \text{mile} & & \\
 SI = 1.76 & = 83.4 (1.18)^{.60} (80)^{.44} (1.76)^{-.72} & = 132 (1.18)^{.65} (80)^{.46} (1.76)^{-.67} \\
 & = (83.4)(1.10)(6.87)(0.67) & = 132(1.11)(7.51)(0.68) \\
 & = \underline{423 \text{ cfs}} & = \underline{748 \text{ cfs}}
 \end{aligned}$$

Secondary Spillway Capacity

$$\begin{aligned}
 Q &= CLH^{3/2} & L = 86 \text{ ft.} \\
 &= 2.6(86)(3)^{1.5} & H = 3 \text{ ft.} \\
 &= \underline{1160 \text{ cfs}}
 \end{aligned}$$

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Dam X-Sec. - OK
4. Area Capacity - OK
5. Outlet Details - OK
6. Spillway Rating - OK
7. Spillway Details - OK
8. Specs. - std SCS - OK
9. EPP - N/A - OK

SCS Annual Yield

DA = 755 Ac = 1.18 mi²
CN = 82
Isogram = 2

10% Chance = 3.0 Ac.-In/Ac

$$755 \times 3 / 12 = \underline{189 \text{ Ac.-Ft.}}$$

50% Chance = 0.80 Ac.-In/Ac

$$755 \times 0.8 / 12 = \underline{50 \text{ Ac.-Ft.}}$$

REPORT ON
WATER PERMIT APPLICATION NO. 2343-2
EDWARD A. BERGESON
August 11, 1995

Water Permit Application No. 2343-2 has been filed by Edward A. Bergeson to impound 32.7 acre-feet of water in a dam. The dam is to be located in the NW 1/4 SW 1/4 of Section 12-T4N-R26E, in Stanley County. The water will be used for livestock watering.

Discussion:

The Bergeson Dam will be classified as a Category 3, Low Hazard dam. It has been designed by the Natural Resources Conservation Service (NRCS). The plans and specifications have been reviewed and approved; however, construction of the dam can not begin until Water Permit Application No. 2343-2 is approved.

The dam will be 29.6 feet high with a normal storage capacity of 32.7 acre-feet with a reservoir level at the spillway elevation, and a maximum storage capacity of 59.7 acre-feet with a reservoir level at the top of dam elevation. A dam of this size and hazard classification is required to have a minimum spillway design capable of passing a 25 year frequency event.

The Bergeson Dam is designed to have an 86 foot wide earthcut spillway with 3 feet of available head, giving the spillway the capacity to pass approximately 1160 cfs. The Bergeson Dam will have a drainage area of 1.18 square miles which produces a peak of 425 cfs for a 25- year frequency event. A 100-year frequency event will produce a peak of approximately 750 cfs.

The annual yield for this drainage with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 50 acre-feet. The annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 190 acre-feet.

The Bergeson Dam will be located on an unnamed tributary to Plum Creek. It will be located approximately 2 miles upstream of the confluence of the unnamed tributary and Plum Creek and approximately 11 miles upstream of the confluence of Plum Creek and the Bad River. There are no existing downstream Water Permits/Rights on the unnamed tributary or Plum Creek between the proposed dam and the Bad River.

page 2

Water Permit Application No. 2343-2

Conclusions:

1. Water Permit Application No. 2343-2 should be approved since unappropriated water is available and approval will not have any adverse effects on existing Water Permits/Rights.
2. If approved, the low flow bypass requirement for downstream domestic use should be a qualification on Water Permit Application No. 2343-2.



Timothy G. Schaal, P.E.
Natural Resources Engineer III

Approved by:



Gale N. Selken, P.E.
Natural Resources Engineer IV

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2343-2, Edward A. Bergeson**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 2343-2, Edward A. Bergeson, 25969 213th Street, Ft. Pierre, SD 57532.

The Chief Engineer is recommending APPROVAL of Application No. 2343-2 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. Water Permit No. 2343-2 authorizes a dam with storage capacity of 32.7 acre-feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

See report on application for additional information.



JOHN HATCH, Chief Engineer
August 15, 1995



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.**

August 17, 1995

Edward A. Bergeson
25969 213th Street
Ft. Pierre, SD 57532

Dear Mr. Bergeson:

Water Permit Application No. 2343-2 for livestock watering use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Capital Journal printed at Pierre, SD (Ph # 605-224-7301). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

August 17, 1995

Capital Journal
PO Box 878
Pierre, SD 57501-0878

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 2343-2 to be published twice. Please publish the first notice on August 23, 1995, with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Edward A. Bergeson, 25969 213th Street, Ft. Pierre, SD 57532 (Ph # 605-567-3560).

A copy of BOTH publications must be SENT to the WATER RIGHTS PROGRAM. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on August 23, 1995, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2343-2 to Appropriate Water

Notice is given that Edward A. Bergeson, 25969 213th Street, Ft. Pierre, SD 57532 has filed an application for a water permit to impound 32.7 acre-feet of runoff water by constructing a dam located in the NW 1/4 SW 1/4 Section 12 with water impounded in the NW 1/4 SW 1/4 Section 12; all in T4N-R26E. The water is to be used for livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2343-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 11, 1995.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Hughes) SSI, Peggy Warner

certify that the attached printed Notice was

taken from the Capital Journalprinted and published in PierreCounty of Hughes and State ofSouth Dakota. The notice was published in
the newspaper on the following two dates:August 23, 1995August 30, 1995Cost of Printing: 35.19Peggy Warner
(Signature)Legal Ad Representative
(Title)Aug. 31, 1995
(Date Signed)

No. 8700

2 tdy 8/23, 8/30

NOTICE OF APPLICATION

NO. 2343-2 to Appropriate
Water

Notice is given the Edward A. Bergeson, 25969 213th Street, Fort Pierre, S.D. 57532 has filed an application for a water permit to impound 32.7 acre-feet of runoff water by constructing a dam located in the NW 1/4 SW 1/4 Section 12 with water impounded in the NW 1/4 SW 1/4 Section 12; all in T4N-R26E. The water is to be used for livestock watering.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2343-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights

Program, Foss Building, 523 E Capitol, Pierre, S.D., 57501 (605-773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 11, 1995.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

DEC 18 1995

Edward A. Bergeson
25969 213th Street
Ft. Pierre, SD 57532

Dear Mr. Bergeson:

Enclosed is Water Permit No. 2343-2 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
605 773-3352

enclosures

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period - i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period

2343-2

**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**Date 12-26-1995

TO: Water Rights Division, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM: Ed Bergeson 25969 213th St.
(name) (address)
Ft. Pierre, SD 57532 567-3560
(city) (state) (zip) (phone)

I have completed the construction of the water diversion system and I have put the water to beneficial use to the maximum extent it is going to be used. I have not exceeded the amounts specified in Water Permit No. 2343-2.

Water Permit No. 234-3 states that the diversion system is to be constructed by 9-11-2000, and that the water is put to beneficial use by 9-11-2004.
(date) (date)

The diversion system was completed on October 1995.
(date)

Applying the water to beneficial use was completed on October 1995.
(date)

You may schedule an inspection so that the Water License may be issued.

Edward Bergeson
(signature)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

March 15, 2000

2343-2

Edward A. Bergeson
25969 213th St.
Ft. Pierre, SD 57532

Dear Mr. Bergeson:

The investigation of your water use system was conducted on September 9, 1999, by Timothy G. Schaal, staff engineer. The investigation included the extent of application of water to beneficial use, as developed under Water Permit No. 2343-2. Your final water right document, the Water License, can now be issued.

Statutes require that we charge a \$50.00 fee for the investigation and issuance of the Water License. Upon receipt of the \$50.00 fee from you, we will begin processing your Water License.

**Please remit fee to:
Department of Environment & Natural Resources
Water Rights Program
523 E. Capitol
Pierre, SD 57501-3181**

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Program
(605) 773-3352

NOTE: On check or money order, please specify your permit number. This will insure proper handling of the fee.

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

N2 416478

Pierre, April 20, 2000

RECEIVED OF Lazy AH Ranch (Edward A. Bergeson), P.O. Box 934, Ft. Pierre, SD 57832
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use _____		
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>2843-2</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By

Chief Engineer

Harold Ebel

REPORT ON INSPECTION OF PERMIT NO. 2343-2

Other permit(s) associated with the project: XXXX

DATE OF INSPECTION: September 9, 1999

NAME & ADDRESS OF INSPECTION CONTACT/ Ed Bergeson

RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE: owner

NAME & ADDRESS OF PERMIT HOLDER: Ed Bergeson, 25969 213th St., Ft. Pierre, SD 57532

DIVERSION POINT LEGAL LOCATION: 150 feet north & 1800 feet east of the SW corner of Section 12-T4N-R26E (SE ¼ SW ¼).

DAM INFORMATION:

- 1) Height to crest 30 feet
- 2) Height to primary spillway 25 feet
- 3) Height to secondary spillway 27 feet
- 4) Crest width 12 feet
- 5) Crest length 254 feet
- 6) Spillway length XXX feet
- 7) Spillway width 86 feet
- 8) Approx. storage (Normal) 32.7 acre-feet
- 9) Approx. storage (Maximum) 60 acre-feet
- 10) Date constructed: 1995

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit N/A
- 2) Special qualifications to permit being abided by yes
- 3) All structures, wells and lands on map yes
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A

Permit No. 2343-2
Bad River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, September 9, 1999, made a thorough examination of the water use system constructed by Ed Bergeson of 25969 213th St., Ft. Pierre, SD 57532 holder of Permit No. 2343-2, bearing the priority of August 10, 1995 authorizing the storage of 32.7 acre-feet of the waters of runoff for livestock use purposes, in Stanley County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

30 foot high earth dam with 32.7 acre-feet of storage capacity

B. Works used to transport water to place of use:

N/A

C. Works used to apply water to beneficial use:

30 foot high earth dam with 32.7 acre-feet of storage capacity

The system is in the following condition **Good**. The point of diversion is located **150 feet north & 1800 feet east of the SW corner of Sec. 12-T4N-R26E (SE ¼ SW ¼)**. The works are capable of storing 32.7 acre-feet of water which is to be used for livestock use. Water has been put to beneficial use to the maximum extent as follows:

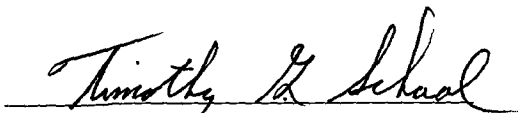
30 foot high earth dam with 32.7 acre-feet of storage capacity

and the license should be issued for 32.7 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes X

Exceptions to compliance are: The dam was constructed in the SE ¼ SW ¼ instead of the NW ¼ SW ¼ of Section 12-T4N-R26E.

Date Report Completed: March 14, 2000



Timothy G. Schaal, P.E.
Natural Resources Engineer III
DENR, Water Rights Program

Approval of Location Change and/or Additional Diversion Point(s)

NAME: Ed Bergeson

ADDRESS: 25969 213th Street, Ft. Pierre SD 57532

DATE: March 14, 2000 COUNTY: Stanley TELEPHONE: 567-3560

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- Developed water source same as permitted source and no additional water appropriated

Yes--The dam was constructed in the SE 1/4 SW 1/4 of Sec. 12-T4N-R26E instead of the NW 1/4 SW 1/4 of the same section, with water impounded in the S 1/2 SE 1/4.

- If irrigation, no new land is irrigated

N/A

- Review of Existing Diversions

Yes

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the diversion point(s) be licensed as developed.



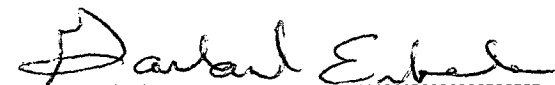
Timothy G. Schaal, P.E.

Natural Resources Engineer III

Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

This change in location and/or additional diversion point(s) does not increase the potential for adverse effects to existing diversions.



Garland Erbele, Chief Engineer

Water Rights Program



Creek

Hohman Ranch

R26 R27E

T4N

Water Permit Application #2343-2

Timothy R. Schuch

March 14, 2000

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2343-2

(1) Edward A Bergeson, 25969 213th St, Ft. Pierre SD 57532 made Application No. 2343-2, August 10, 1995 for a water permit to impound 32.7 acre-feet of water from runoff, Stanley County, South Dakota for livestock watering and domestic purposes. Permit No. 2343-2, with a priority date of August 10, 1995 was approved September 11, 1995 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before September 11, 2000 and for the application to beneficial use of said water on or before September 11, 2004.

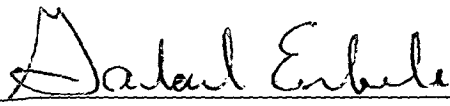
An investigation conducted for licensing purposes found the dam under Water Permit No. 2343-2 was not in the location authorized by the permit. Pursuant to SDCL 46-5-13.1, the Chief Engineer makes a finding that the change in location of diversion point does not increase the potential for interference with existing water rights.

The permit holder submitted a *Notice of Completion of Works and Application of Water to Beneficial Use* on January 2, 1996. The *Notice* stated the diversion system was completed October, 1995 and the water placed to beneficial use October, 1995.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the storage dam and is entitled to impound 32.7 acre-feet of water for beneficial use with sufficient water annually to maintain the water level to the outlet elevation. The location of the storage dam (spillway) is 150 feet north and 1,800 feet east of the southwest corner of Section 12-T4N-R26E (SE ¼ SW ¼).

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Edward A Bergeson, 25969 213th St, Ft. Pierre SD 57532 the holder and/or owner of Water Right No. 2343-2 is issued a license to appropriate water, the right to impound 32.7 acre-feet of water from runoff with sufficient water annually to maintain the water level to the outlet elevation with a priority date of August 10, 1995 from the location specified in (2) of this license for livestock watering and domestic purposes. This license is subject to any limitations or qualifications listed in Water Right No. 2343-2 and subject to South Dakota State Law.



Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAY 12 2000

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

MAY 12 2000

2343-2

Edward A. Bergeson
25969 213th St.
Ft. Pierre, SD 57532

Dear Mr. Bergeson:

Enclosed is Water License No. 2343-2 and Receipt No. 416478 for \$50.00 which was assessed for an investigation and issuance of the license. Water License No. 2343-2 is the final document which completes the process of obtaining a water right.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

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enclosures